

# Lipid-Lowering Combination Therapy in Atherosclerosis Management

Evidence and strategies for improved outcomes in patients at high cardiovascular risk

## Atherosclerosis

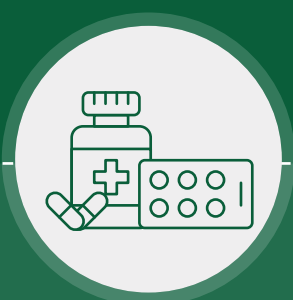


It is the narrowing of arteries due to the accumulation of low-density lipoprotein cholesterol (LDLc)<sup>1</sup>

It leads to many cardiovascular diseases (CVDs), one of the leading causes of death worldwide<sup>2</sup>



## Statins



Commonly used to manage atherosclerotic cardiovascular (CV) events<sup>1</sup>



They reduce the risk of CVDs by lowering the level of circulating LDLc<sup>1</sup>



**However, it is difficult to achieve the recommended LDLc goals with statins alone<sup>1</sup>**

# Why use a lipid-lowering combination therapy?

## Lipid-lowering therapies<sup>1</sup>

(statin + non-statin)

Are safe



LDLc < 55mg/dl



Risk of CV events



Plaque regression



Improved patient outcomes

# Scientific evidence supporting lipid-lowering combination therapies

## The IMPROVE-IT trial<sup>2,3</sup>



2005 to 2010



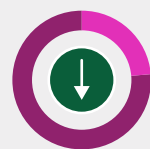
18,144 patients with acute coronary syndrome



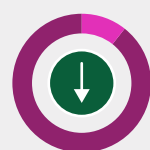
Simvastatin–ezetimibe (40 mg + 10 mg) versus simvastatin monotherapy (40 mg) versus placebo



Simvastatin–ezetimibe group



24% reduction in LDLc



6% lesser risk of CV events

## The FOURIER trial<sup>2,4</sup>



2013 to 2015



27,564 patients with CVD



Evolocumab 140 mg every 2 weeks versus placebo



LDLc  
92 mg/dl to 30 mg/dl



15% reduction in CV events

## The ODYSSEY OUTCOMES trial<sup>2,5</sup>



2015 to 2018



18,924 patients with prior CV events in the past year



75 mg of subcutaneous alirocumab versus placebo



Administered for 2 weeks



LDLc  
92 mg/dl to 66 mg/dl



Risk of CVD

## The CLEAR Outcomes trial<sup>2,6</sup>



2016 to 2022<sup>6</sup>



13,970 CVD patients with statin intolerance



180 mg of oral bempedoic acid daily versus placebo



21% reduction in LDLc



13% reduction in CV events

## The REDUCE-IT trial<sup>2,7</sup>

2 g icosapent ethyl twice daily + statin therapy



25% reduction in CV events

## Implementing lipid-lowering combination therapies

### Current guidelines and challenges<sup>1</sup>

- ⚠ Treatment initially begins with statin with non-statin being added later
- ⚠ Very small number of patients attain recommended LDLc goals
- ⚠ <40% patients are prescribed intensive statin monotherapy needed to achieve 50% LDLc reduction
- ⚠ Only 10% of high-risk patients are on combination therapy

### What can be done?

#### Lipid-lowering combination therapies<sup>1</sup>



Must be prescribed soon after disease diagnosis



Should lower LDLc quickly



Should be personalized based on patient requirements

**Lipid-lowering combination therapies are superior to statin monotherapies and must be adopted as the standard treatment for patients with a high risk of CVDs**

### Reference

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